UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,180	07/16/2003	Kenneth L. Levy	P0855	2246

23735   7590   10/30/2007
DIGIMARC CORPORATION
9405 SW GEMINI DRIVE
BEAVERTON, OR 97008

EXAMINER
TO, BAOTRAN N

ART UNIT	PAPER NUMBER
2135	

MAIL DATE	DELIVERY MODE
10/30/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/622,180	LEVY, KENNETH L.
	Examiner	**Art Unit**	
	Baotran N. To	2135	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _15 August 2007_.

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-39 and 41-48_ is/are pending in the application.

   4a) Of the above claim(s) _40 (Canceled)_ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-39 and 41-48_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
     Paper No(s)/Mail Date _05/01/07_.

4)☐ Interview Summary (PTO-413)
     Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   This Office action is responsive to the Applicant's Amendment filed 08/15/2007.

Claim 40 is canceled.

Claims 1-39 and 41-48 remain for examination.

Election/Restrictions

2.   Applicant's election with traverse of **Species III** in the reply filed on 08/15/2007 is

acknowledged. The traversal is on the ground(s) that the claims of Species I and II,

claims 1-38, can also be searched and examined without serious burden to the

Examiner. This is found persuasive.

Information Disclosure Statement

3.   The information disclosure statement (IDS) submitted on 05/01/2007. The

submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the

information disclosure statement is being considered by the examiner. However, the

reference (Shear et al. 2001/0042043) listing in the information disclosure statement

(IDS) has not been considered because this reference has been cited by the examiner

on form PTO-892 (See Office action dated 11/01/2006).

Response to Arguments

4.   Applicant's arguments filed 05/01/2007 have been fully considered but they are

not persuasive.

Applicant argues with Claim 18, "The Office Action points to the abstract, Col. 113, lines 30-34 and 54-58, and Col. 121, lines 14-30 as teaching the above acts. We respectfully disagree for at least the following reasons. First, the above cited passages say nothing about comparing content buffered in an output buffer with content buffered in an input buffer. And reference to the abstract stating a presence of input/output ports in a system does not teach comparing content in input/output buffers" (Page 14 of Remarks).

Examiner respectfully disagrees with applicant. Hoffberg discloses, "A fractal-based system includes a database of image objects, which may be preprocessed in a manner which makes them suitable for comparison to a fractal-transformed image representation of an image to be analyzed" (Col. 113, lines 54-59). Furthermore, Hoffberg discloses, "analyzing first media content buffered in the output buffer (see abstract, col. 113, lines 30-34, the interface system may analyze stored data); analyzing second media content buffered in the input buffer (see abstract, col. 113, lines 30-34, the interface system may analyze data present in a data stream); and comparing the first media content buffered in the output buffer with the second media content buffered in the input buffer (see col. 113, lines 30-34 & 54-58, Hoffberg reference states it system includes a database of image objects(first media) for comparison to an image to be analyzed (second media), wherein a copy operation is modified or disabled (see col. 121, lines 14-30) when the first media content and the second media content match or otherwise coincide (see col. 113, lines 53-64; "A degree of relatedness").

Applicant argues with Claim 33, "First, the above cited passages say nothing about comparing content buffered in an output buffer with content buffered in an input buffer. And reference to the abstract stating a presence of input/output ports in a system does not teach comparing content in input/output buffers (Page 15 of Remarks).

Examiner respectfully disagrees. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., **comparing content buffered in an output buffer with content buffered in an input buffer**) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant further argues with Claim 48, "The cited passages in the Shear publication do not teach both a watermark payload and key as used in this claim. In particular, the cited passages in the Shear publication do not teach at least determining which out of a plurality of copy control states should govern protected media content by reference to a watermark key, and providing copy control according to the determined copy control state through the determined copy control system" (Page 16 of Remarks).

Examiner respectfully disagrees with this argument. Shear explicitly discloses, a watermark key (see page 15, ¶ [0218], element 210, hidden key) and a watermark payload (see page 15, ¶ [0213]; element 202, metadata). Furthermore, Shear discloses determining which out of a plurality of copy control states (see page 18, ¶ [0270], "right

management rules") should govern the protected media content (see page 2, ¶ [0030],

protecting DVD content) by reference to the watermark key (see page 5, ¶ [0062],

control codes), and providing copy control (see page 18, ¶ [0270], "no copy/once

copy/many copies") according to the determined copy control state (see page 18, ¶

[0270], "right management rules") through the determined copy control system (see;

page 18, [0220], "control set 204").

Applicant further argues with Claim 39, "The Office Action addresses the

italicized features when discussing claim 40. The Office Action uses "control codes"

discussed in paragraph 62 as meeting the watermark "key" features. We respectfully

disagree with this assessment. The control codes are understood to be auxiliary data

carried by a watermark payload. This differs from a watermark key, which in the context

of claim 39, reveals or provides some secret or information about a watermark

embedding or decoding process" (Page 17 of Remarks).

Examiner respectfully disagrees with this applicant. Shear explicitly discloses

"the keys required to decrypt encrypted key block 208 may come from several different

(possibly alternative) sources. In the example shown in FIG. 3, disk 100 stores one or

more decryption keys for decrypting key block 208 on the medium itself in the form of a

hidden key(s) 210. Hidden key(s) 210 may be stored, for example, in a location on disk

100 not normally accessible. This "not normally accessible" location could, for

example, be physically enabled for drives 80 installed in players 52 and disabled for

drives 80' installed in personal computers 62. Enablement could be provided by

different firmware, a jumper on drive 80, etc. Hidden key(s) 210 could be arranged on

disk 100 so that any attempt to physically copy the disk would result in a failure to copy

the hidden key" [0218].

Applicant further argues with Claim 1, "The cited passage of the Shear

publication (paragraph 254) does not teach or suggest the conditioned nature of claim

1, e.g., "if the identifier is not found in the data repository, adding the identifier to the

data repository" (Page 18 of Remarks).

Examiner respectfully disagrees with this contention. Shear explicitly discloses,

"the player 52 can be programmed to place a copy it makes of a digital property such

as a film in encrypted form inside a tamper-resistant software container. The software

container may carry with it a code indicating that the digital property is a copy rather

than an original. The sending player 52 may also put its own unique identifier (or the

unique identifier of an intended receiving device such as another player 52, a video

cassette player or equipment 50) in the same secure container to enforce a

requirement that the copy can be played only on the intended receiving device. Player

52 (or other receiving device) can be programmed to make no copies (or no additional

copies) upon detecting that the digital property is a copy rather than an original. If

desired, a player 52 can be programmed to refuse to play a digital property that is not

packaged with the player's unique ID" [0254].

For at least the above reasons, it is believed that the rejection is maintained.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5.   Claims 1-17, 39-42, 45-48 are rejected under 35 U.S.C. 102(b) as being

unpatentable by Shear et al. U.S. PG Pub. 2001/0042043.

With respect to claim 1, Shear reference teaches determining whether the media

content is designated as copy once (see page 2-3, ¶ [0030], "one-generation copy";

page 17, ¶ [0251]; "copy once");

if the media content is designated as copy once, obtaining an identifier for the

media content (see page 17, ¶ [0251-0252]; "identifier");

querying a data repository which is separate from the media content itself to

determine if the identifier is stored therein (see page 17, ¶ [0251]; "query control to

determine whether copying is allowed")

if the identifier is found in the data repository, modifying or disabling a copy

function (see page 18, ¶ [0254]); and

if the identifier is not found in the data repository, adding the identifier to the data repository (see page 18, ¶ [0254], "the player 52 can be programmed to place a copy it makes of a digital property such as a film in encrypted form inside a tamper-resistant software container. The sending player 52 may also put its own unique identifier in the same secure container).

With respect to claim 2, Shear reference teaches wherein the identifier comprises a content identifier (see page 7, ¶ [0078], "content identifier").

With respect to claim 3, Shear reference teaches wherein the content identifier is conveyed by a digital watermark embedded in the media content (see page 5, ¶ [0062]), and said obtaining comprises reading the digital watermark to obtain the content identifier (see page 5, ¶ [0062]);

With respect to claim 4, Shear reference teaches wherein the content identifier is obtained from a header associated with the media content (see page 20, ¶ [0284], Fig. 7, element 711).

With respect to claim 5, Shear reference teaches wherein the content identifier is obtained from an encryption system associated with the media content (see page 2-3, ¶ [0030], "encryption method").

With respect to claim 6, Shear reference teaches wherein the content identifier is obtained by determining a fingerprint of the media content (see page 5, ¶ [0062], "fingerprints").

With respect to claim 7, Shear reference teaches wherein the media content is stored on physical media (see page 1, ¶ [0003], "DVDs"), and the identifier comprises a physical media identifier (see page 4, ¶ [0054]).

With respect to claim 8, Shear reference teaches wherein the physical media comprises a DVD (see page 1, ¶ [0003], "DVDs';), and the physical media identifier comprises a unique serial number corresponding to the DVD (see page 5, ¶ [0056], "unique identifier").

With respect to claim 9, Shear reference teaches further comprising allowing copying of the media content when the identifier is not found in the data repository (see page 17, ¶ [0251]).

With respect to claim 10, Shear reference teaches wherein the media content comprises a digital watermark embedded therein (see page 18, ¶ [0255]), the digital watermark indicating that the media content is designated as copy once (see page 11, ¶

[0168], "copied only once"), and wherein said determining comprises reading the digital

watermark (see page 11, ¶ [0168], "copied only once").

With respect to claim 11, Shear reference teaches wherein the media content

comprises metadata associated therewith (see page 9, ¶ [0128], "metadata"), the

metadata indicating that the media content is designated as copy once (see page 9, ¶

[0129]; page 11, ¶ [0168], "copied only once"), and wherein said determining comprises

analyzing the metadata (see page 11, ¶ [0168]).

With respect to claim 12, Shear reference teaches wherein the metadata is

stored in a file header (see page 20, ¶ [0284]; Fig. 7, element 711).

With respect to claim 13, Shear reference teaches wherein the media content is

associated with an encryption system (see page 8, ¶ [0083], "encryption techniques"),

the encryption system indicating that the media content is designated as copy once (see

page 11, ¶ [0168], "copied only once"), and wherein said determining comprises

communicating with the encryption system (see page 11, ¶ [0168).

With respect to claim 14, Shear reference teaches a recording device performing

the method of claim 1 (see fig. 1A, element 52; page 17, ¶ [0251]).

With respect to claim 15, Shear reference teaches wherein the data repository is

co-located with the recording device (see Fig. 1A, element 100, "when the disk is inside

the player").

With respect to claim 16, Shear reference teaches wherein the data repository is

remotely located from the recording device (see Fig. 1A, element 100, "when the disk is

outside the player").

With respect to claim 17, Shear reference teaches a recording device that is

operable to copy media content, said device comprising: a data repository (see abstract,

"DVDs"); electronic processing circuitry (see abstract, "disk player"); a system

communications bus to facilitate communication between the data repository and the

electronic processing Circuitry, said electronic processing circuitry executing acts of:

determining whether media content which is separate from the data repository is

designated as copy once (see page 2-3, ¶ [0030], "one-generation copy"; page 17, ¶

[0251]; "copy once");

if the media content is designated as copy once, obtaining an identifier for the

media content (see page 17, ¶ [0251]; "identifier");

querying a data repository to determine if the identifier is stored therein (see

page 17, ¶ [0251]; "query control to determine whether copying is allowed")

if the identifier is found in the data repository, modifying or disabling a copy

function (see page 18, ¶ [0254]); and

if the identifier is not found in the data repository, adding the identifier to the data

repository (see page 18, ¶ [0254], "the player 52 can be programmed to place a copy it

makes of a digital property such as a film in encrypted form inside a tamper-resistant

software container. The sending player 52 may also put its own unique identifier in the

same secure container').

With respect to claim 39, Shear reference teaches a method of providing copy

control for protected media content comprising:

determining which out of a plurality of copy control systems (see; page 18,

[0220], "control set 204") applies to the protected media content (see page 3, ¶ [0034],

"selection of control information"; page 2, ¶ [0030], DVD content), said protected media

content (see page 5, ¶ [0062], "VHS tape") comprises a digital watermark (see page 5,

[0062], watermarks) embedded therein according to a key (see Figure 3, element 210,

hidden key), said determining determines which out of a plurality of copy control

systems (see; page 18, [0220], "control set 204") applies to the protected media content

(see page 5, ¶ [0062], "VHS tape") based on the key ((see page 15, ¶ [0218], element

210, hidden key); and

controlling the protected media content (see page 2, ¶ [0030], DVD content)

according to a determined copy control system (see; page 18, [0220], "control set 204").

With respect to claim 48, Shear reference teaches a method of providing copy

control for protected media content (see abstract; "digital property content"), the

protected media content comprising a digital watermark embedded (see page 19 & 20,

11 [0282], (watermarking/fingerprinting) therein according to a key (see Figure 3,

element 210, hidden key), said digital watermark comprising a payload (see page 15, ¶
[0213]; element 202), said method comprising:

determining which out of a plurality of copy control states (see page 18, ¶ [0270],
"right management rules") should govern the protected media content (see page 2, ¶
[0030], protecting DVD content) by reference to the watermark key (see page 15, ¶
[0218], element 210, hidden key);

determining which out of a plurality of copy control systems (see; page 18,
[0220], "control set 204") the content should be handled by reference to the watermark
payload (see page 15, ¶ [0213]; element 202, metadata); and

providing copy control (see page 18, ¶ [0270], "no copy/once copy/many copies")
according to the determined copy control state (see page 18, ¶ [0270], "right
management rules") through the determined copy control system (see; page 18, [0220],
"control set 204").

With respect to claim 41, Shear reference teaches wherein the key (see Figure 3,
element 210, hidden key) further designates a copy control state (see page 18, ¶
[0270], "right management rules").

With respect to claim 42, Shear reference teaches wherein the copy control state
(see page 18, ¶ [0270], "right management rules") comprises at least one of copy never
(see page 3, ¶ [0030], "no copies"; page 18, ¶ [0270], "no copy"), copy once (see page
3, ¶ [0030], "one-generation copy"; page 18, ¶ [0270], "one copy"), copy freely (see

page 3, ¶ [0030], "unlimited copying" page 18, ¶ [0270], "many copies") or copy no more

(see page 3, ¶ [0030], "no copies"; page 18, ¶ [0270], "no copy").

With respect to claim 45, Shear reference teaches the digital watermark

comprising a multi-bit payload, and wherein said determining determines which out of a

plurality of copy control systems (see; page 18, [0220], "control set 204") applies to the

protected media content based on at least one bit of the multi-bit payload (see page 15,

¶ [0213]; element 202, metadata) and on the key (see page 15, ¶ [0218], element 210,

hidden key).

With respect to claim 46, Shear reference teaches wherein each of the plurality

of copy control systems (see; page 18, ¶ [0220], "control set 204") is associated with a

unique sequence of bits (see page 15, ¶ [0218]).

With respect to claim 47, Shear reference teaches wherein the plurality of copy

control systems (see; page 18, ¶ [0220], "control set 204") comprises at least one of a

DVD system (see page 1, 11 [0003], "DVDs") or a conditional access TV system (see

page 4, 11 [0049], "digital movies over satellite and cable systems"; page 4, 11 [0054],

"DigiBox" page 16, 11 [0221],"digital televisions").

6.   Claims 18-32 are rejected under 35 U.S.C. 102(e) as being unpatentable by

Hoffberg, U.S. Patent 6,850,252.

With respect to claim 18, Hoffberg reference teaches a method of providing copy

protection for protected media content on a computer system, the computer system

comprising an output port (see abstract, "output port") and an associated output buffer

(see abstract, "output port"; hardware register is a storage area for hardware

input/output), and an input port (see abstract, "input port") and an associated input

buffer (see abstract, "input port"; hardware register is a storage area for hardware

input/output), said method comprising:

analyzing first media content buffered in the output buffer (see abstract, col. 113,

lines 30-34, the interface system may analyze stored data);

analyzing second media content buffered in the input buffer (see abstract, col.

113, lines 30-34, the interface system may analyze data present in a data stream); and

comparing the first media content buffered in the output buffer with the second

media content buffered in the input buffer (see col. 113, lines 30-34 & 54-58, Hoffberg

reference states it system includes a database of image objects(first media) for

comparison to an image to be analyzed (second media), wherein a copy operation is

modified or disabled (see col. 121, lines 14-30) when the first media content and the

second media content match or otherwise coincide (see col. 113, lines 53-64; "A degree

of relatedness").

With respect to claim 19, Hoffberg reference teacheswherein the computer system comprises a single computer system (see abstract, "an intelligent electronic appliance").

With respect to claim 20 and 23, Hoffberg reference teaches wherein the output buffer comprises a matrix of output buffers, and the input buffer comprises a matrix of input buffers (see col. 220, lines 9-12, "computer networking"; a computer network contains multiple computers which has multiple I/O port, which would contain multiple hardware registers).

With respect to claim 21 and 24, Hoffberg reference teaches wherein said comparing compares at least active output buffers with active input buffers (see abstract, "input and/or output port"; a hardware register is a storage area for hardware input/output).

With respect to claim 22, Hoffberg reference teaches wherein the computer system comprises at least two networked computers (see col. 220, lines 9-12, "computer networking"), with a first computer comprising the output port (see abstract, "input and/or output port") and a second computer comprising the input port (see abstract, "input and/or output port").

With respect to claim 25, Hoffberg.reference teaches wherein the first media content (see col. 135, lines 20-22) comprises a first identifier (see col. 135, line 47- col. 136, line 22, "identifiers") embedded therein in the form of a digital watermark (see col. 216, lines 50-53) and the second media content (see col. 135, lines 28-30) comprises a second identifier (see col. 135, line 47- col. 136, line 22, "identifiers") embedded therein in the form of a digital watermark (see col. 216, lines 50-53), and wherein said analyzing first media content buffered in the output buffer (see abstract, "input and/or output port"; a hardware register is a storage area for hardware input/output) comprises obtaining the first identifier from its watermark (see col. 221, lines 25-39), said analyzing second media content buffered in the input buffer (see abstract, "input and/or output port"; a hardware register is a storage area for hardware input/output) comprises obtaining the second identifier from its watermark (see col. 221, lines 25-39), and said comparing the first media content buffered in the output buffer and the second media content buffered in the input buffer (see col. 113, lines 30-34 & 54-58) comprises comparing at least a portion of the first identifier with at least a portion of the second identifier (see col. 135, lines 22-30 & lines 64-65).

With respect to claim 26, Hoffberg reference teaches wherein the copy operation is modified or disabled (see col. 121 lines 14-30) when the portion of the first identifier and the portion of the second identifier match or otherwise coincide (see col. 113, lines 53-64; "A degree of relatedness"; col. 135, lines 22-30 & lines 64-65).

With respect to claim 27, Hoffberg reference teaches wherein the first media content comprises a first identifier (see col. 135, line 47- col. 136, line 22) embedded in the form of a digital watermark (see col. 216, lines 50-53), and wherein said analyzing first media content buffered in the output buffer (see abstract, "input and/or output port"; a hardware register is a storage area for hardware input/output) comprises obtaining the first identifier fromits watermark (see col. 221, lines 25-39), and said analyzing second media content buffered in the input buffer (see abstract, "input and/or output port"; a hardware register is a storage area for hardware input/output) comprises obtaining aplurality of identifiers (see col. 135, lines 22-30; computer network) embedded as digital watermarks in the second media (see col. 221, lines 25- 39) over a time period (see col. 112, lines 55-58; col. 119, lines 2-15), and said comparing the first media content buffered in the output buffer and the second media content buffered in the input buffer (see col. 113, lines 30-34 & 54-58) comprises comparing at least a portion of the first identifier with at least portions of the plurality of identifiers (see col. 135, lines 22-30 & lines 64-65).

With respect to claim 28, Hoffberg reference teaches wherein the copy operation is modified or disables (see col. 121 lines 14-30) when the portion of the first identifier and the portions of the plurality of identifiers match or otherwise coincide (see col. 113, lines 53-64; "A degree of relatedness"; col. 135, lines 22-30 & lines 64-65).

With respect to claim 32, Hoffberg reference teaches further comprising determining that the media content is protected via reference to at least one of a digital watermark (see col. 216, lines 50-53), header, metadata (see abstract; col. 131, line 61-col. 132, line 6) and encryption system (see col. 118, lines 54-57; col. 161, lines 24-33).

With respect to claim 33, Hoffberg reference teaches a method of providing copy protection for protected media content on a computer system, the computer system comprising an output port (see abstract, "output port".) and an associated output buffer (see abstract, "output port"; hardware register is a storage area for hardware input/output), and an input port (see abstract, "input port") and an associated input buffer (see abstract, "input port"; hardware register is a storage area for hardware input/output), said method comprising:

obtaining first media content buffered in the output buffer (see abstract, col. 113, lines 30-34, the interface system may analyze stored data);

obtaining second media content buffered in the input buffer (see abstract, col. 113, lines 30-34, the interface system may analyze data present in a data stream); and

comparing the first media content buffered in the output buffer and the second media content buffered in the input buffer (see col. 113, lines 30-34 & 54-58, Hoffberg reference states it system includes a database of image objects(first media) for comparison to an image to be analyzed(second media)) through correlation of the first media content with the second media content (see col. 172, lines 23-30), wherein a copy operation is modified or disabled (see col. 121 lines 14-30) when the correlation of

the first media content and the second media content (see col. 172, lines 23-30)

indicates that the first media content and the second media content match or otherwise

coincide (see col. 113, lines 53-64; "A degree of relatedness").

With respect to claim 34, Hoffberg reference teaches wherein the correlation

makes use of a transform domain (see Fig. 22, element 2205; Fig. 28, "Transform

Domain"; col. 141, lines 24-63; col. 183, lines 25-27).

With respect to claim 35, Hoffberg reference teaches wherein the transform

domain comprises a Fourier domain (see col. 132, lines 14-18; "Fourier

transformation").

With respect to claim 36, Hoffberg reference teaches wherein the first media

content and the second media content each comprise audio (see abstract, "media

content, for example audio").

With respect to claim 37, Hoffberg reference teaches further comprising

compensating for a time delay associated with the second media content relative to the

first media content (see col. 112, lines 55-58; col. 119, lines 2-15).

With respect to claim 38, Hoffberg reference teaches further comprising

compensating for a time delay associated with the second media content relative to the

first media content (see col. 112, lines 55-58; col. 119, lines 2-15).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7.   Claims 43 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Shear as applied to claim 39 above, and further in view of Epstein (U.S. PG Pub.

2003/0159043) hereinafter Epstein.

With respect to claim 43, Shear reference teaches the key (see page 15, ¶

[0218], element 210, hidden key) indicates at least one of an embedding protocol (see

page 5, ¶ [0062], rights related control), a watermark payload encryption scheme (see

page 5, ¶ [0062], watermarks), an embedding characteristic (page 5, ¶ [0062], usage

information), but Shear reference doesn't teach wherein the key indicates a pseudo-

random sequence that is used to embed the watermark, locations within the media

content used for watermark embedding, media content features to be modified to effect

embedding and semantic meaning of particular features of the media content. Epstein

reference teaches wherein the key indicates a pseudo-random sequence that is used to embed the watermark (see page 1, ¶ [0012]), locations within the media content used for watermark embedding (see page 1, ¶ [0012]), media content features to be modified to effect embedding and semantic meaning of particular features of the media content (see page 1, ¶ [0011]). It would have been obvious at the time the invention was made to person having ordinary skill in the art to which said subject matter pertains to have modified Shear reference to include the teachings of Epstein to include detail correlation between the key and the watermark for increased protection of copyrighted content.

With respect to claim 44, Shear reference teaches wherein each of the plurality of copy control systems (see; page 18, ¶ [0220], "control set 204"). Shear reference doesn't teach wherein each of the plurality of copy control systems corresponds to at least one unique key. Epstein reference teaches wherein each of the plurality of copy control systems corresponds to at least one unique key (see page 4, ¶ [0045], "unique receiver identifier"). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to have modified Shear reference to include the teachings of Epstein to include the unique receiver identifier for the purpose of determining the copy protection status of received content (see page 4. ¶ [0045]).

8.   Claims 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffberg, U.S. Patent 6,850,252 in view of Shear et al. U.S. PG Pub. 2001/0042043.

With respect to claim 29, Hoffberg reference teaches analyzing first media content buffered in the output buffer (see abstract, "input and/or output port"; a hardware register is a storage area for hardware input/output), analyzing second media content buffered in the input buffer (see abstract, "input and/or output port"; a hardware register is a storage area for hardware input/output) and comparing the first media

content buffered in the output buffer and the second media content buffered in the input buffer (see col. 113, lines 30-34 & 54-58).

Hoffberg reference doesn't teach determining a first fingerprint of the first media content, determining a second fingerprint of the second media content, and comprises comparing at least a portion of the first fingerprint with at least a portion of the second fingerprint. Shear reference teaches determining a first fingerprint (see page 18, ¶ [0265], "fingerprinting") of the first media content, determining a second fingerprint (see page 18, ¶ [0265], "fingerprinting") of the second media content, and comprises comparing at least a portion of the first fingerprint with at least a portion of the second fingerprint (see page 18, ¶ [0265], "fingerprinting"). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to have modified Hoffberg reference to include the teachings of Shear to have included fingerprinting in the media content for the purpose of providing secure rights management protection (see page 18, ¶ [0264]).

With respect to claim 30, Hoffberg reference teaches wherein the copy operation is modified or disabled (see col. 121 lines 14-30) when the portion of the first and the portion of the second match or otherwise coincide (see col. 113, lines 53-64; "A degree of relatedness"). Hoffberg reference doesn't teach the use of fingerprints. Shear reference teaches the use of fingerprints (see page 19, ¶ [0276], "fingerprinting methods"), It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to have modified Hoffberg reference to include the teachings of Shear to have included fingerprinting in the media content for the purpose of providing secure rights management protection (see page 18, ¶ [0264]).

With respect to claim 31, Hoffberg reference teaches further comprising compensating for a time delay, associated with the second media content, relative to the first media content (see col. 112, lines 55-58; col. 119, lines 2-15).

Conclusion

9.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Baotran N. To whose telephone number is 571-272-

8156. The examiner can normally be reached on Monday-Friday from 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kim Y. Vu can be reached on 571-272-3859. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BT
10/24/2007
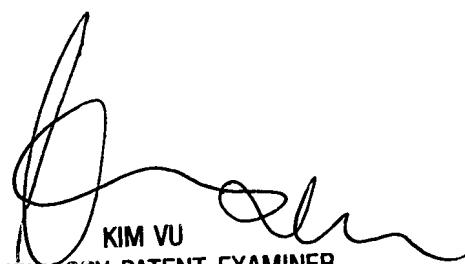
KIM VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100